Public Health Approach to Alcohol Policy: A Report of the Provincial Health Officer

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DOC
BC
P658
D:P82
2002
c.3

BRITISH COLUMBIA

Ministry of Health Planning

Office of the Provincial Health Officer

May 2002

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National Library of Canada Cataloguing in Publication Data
British Columbia. Office of the Provincial Health Officer
Public health approach to alcohol policy

Issued by British Columbia Ministry of Health Planning.
Also available on the Internet.
Includes bibliographical references: p.
ISBN 0-7726-4783-6

1. Drinking of alcoholic beverages - British Columbia.
2. Drinking of alcoholic beverages – Health aspects.
3. Alcoholic beverages – Government policy - British Columbia.
   I. Kendall, Perry R. W. (Perry Robert William), 1943-.
   II. British Columbia. Ministry of Health Planning.
   III. Title.

HV5309.B7874 2002 362.292'09711 C2002-960107-X

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VICTORIA BC V8V 1X4 MAY 27 2002

Acknowledgments

The Provincial Health Officer gratefully acknowledges the following individuals who shared their expertise and provided constructive comments on drafts of this report:

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Summary

This review by the Provincial Health Officer has been prompted by recent changes to British Columbia's liquor laws that will increase the availability of alcohol products in B.C.

Increased availability of alcohol may result in increased consumption. The impacts of this will depend on who increases their drinking and how they do it. However, evidence from other jurisdictions suggests that increased access and increased consumption may be associated with increasing levels of alcohol-related harms.

Per capita alcohol consumption in B.C. has been declining, as have the number and rate of alcohol-related traffic collisions reported by police. Other indicators of alcohol-related problems are showing little, if any, improvement. The rates of alcohol-related deaths and alcohol-related spousal assaults have not changed significantly in the past decade, while rates of regular heavy drinking show a worsening trend.

Moderate use of alcohol poses no harm to most people and is beneficial to some. Alcohol also contributes to the provincial economy. The public policy challenge is to optimize the benefits of alcohol consumption while minimizing the potential harms. Given that hazardous drinking patterns are predominantly found in younger rather than older age groups and in males rather than females, any increase in alcohol consumption either by volume or by frequency in these groups should be viewed with concern. This concern is mirrored in public attitudes, with older Canadians and women tending to favour more restrictive policies, and younger Canadians favouring greater access.

Government occupies a unique role with respect to alcohol. It is the regulator, the wholesaler, and the retailer. Government realizes significant remuneration from alcohol and also pays many of the costs incurred when alcohol is misused. Given the goal of maximizing benefits and minimizing costs, the Provincial Health Officer recommends that changes to liberalize alcohol sales be accompanied by:

1. Monitoring of public health and safety impacts of policy changes, e.g., rates of alcohol-related traffic crashes, crime, and chronic health problems.
2. Increased prevention programming, with a focus on children and youth and on modifying risky drinking behaviours.
3. Rigorous monitoring and enforcement of laws relating to sales to underage and intoxicated consumers.

4. An enhancement of the addictions treatment and rehabilitation system.
5. Evaluation of prevention policies and programs, with reduction of drinking-related harms as the main criterion of effectiveness.
6. Involvement of public health experts in the planning of future changes to alcohol policy.

The above recommendations will require a dedicated and secure funding base. One option is to set aside an amount equivalent to 10 per cent of the anticipated tax revenue from increased alcohol sales for enhancements to prevention programming. This approach has been used successfully in New Zealand (Single, 2001).

Introduction

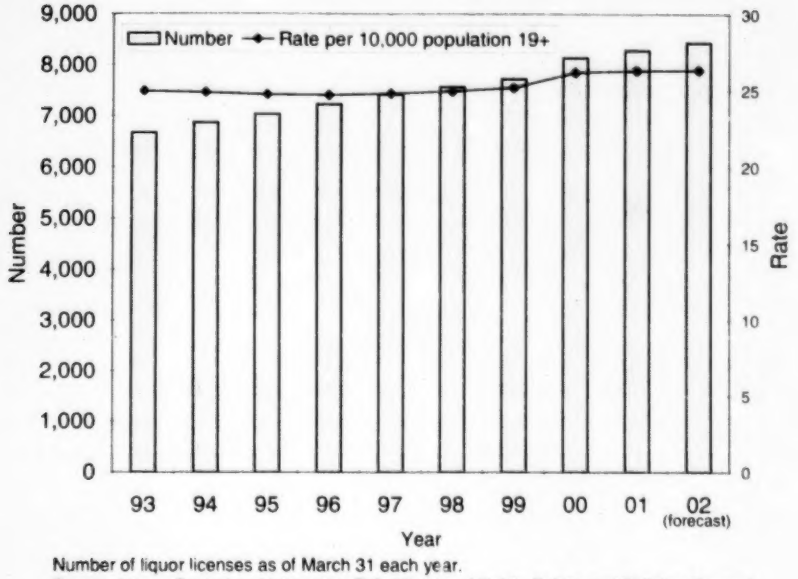
The Provincial Health Officer is required by the *Health Act* to report independently to British Columbians on their health status, on health issues, and on the need for legislation, policies, or other actions that will improve the health of the population. In addition to producing an annual report, the *Health Act* states that reports should be issued from time to time in the manner the Provincial Health Officer considers most appropriate.

This review has been prompted by recent changes to the rules and regulations governing the sale of alcohol products in B.C. In March 2002, the provincial government announced a liquor reform strategy that will increase the availability of alcohol. The 10-year moratorium on the number of cold beer and wine stores will be lifted, and the 20 kilometre distance restrictions are being eliminated for rural agency stores. Beer and wine stores will be able to double their floor space and sell spirits. Bars and lounges will be permitted to remain open until 4:00 a.m., although local support and public interest will prevail. In addition, the Liquor Distribution Branch of B.C. is undergoing a core services review, the outcome of which may have significant impact on the roles of government in regulating, wholesaling, or retailing alcohol.

Over the past 10 years, the number of liquor licenses in B.C. has increased 26 per cent, a rate slightly higher than population growth (Figure 1). The new licensing policies, when finalized, will likely increase the rate of growth, although the Liquor Control and Licensing Branch is not predicting a marked increase (H. Pedneault, personal communication, April 18, 2002). A stated priority of the liquor reforms is to improve public safety through freeing up resources to concentrate on public safety issues like underage drinking, public intoxication, overcrowding, and illegal liquor. Additional priorities are to provide more consumer choice for alcohol purchases and to simplify the regulatory framework (B.C. Ministry of Public Safety and Solicitor General, 2002).

Figure 1

Liquor Licenses in B.C.



Number of liquor licenses as of March 31 each year.
Source: Liquor Control and Licensing, B.C. Ministry of Public Safety and Solicitor General.

This Provincial Health Officer's report is based strictly on a public health perspective. There are other windows through which the issue can be viewed – social, economic (employment), political, and ethical. Reasoned views from these perspectives should also be considered in developing alcohol policy for British Columbia.

Alcohol Consumption

Alcohol has been used by almost all cultures, probably since prehistoric times. Social use of alcohol in moderation is harmless to most people and beneficial to some. Unfortunately, alcohol has an intrinsic capacity to cause harm if not used in a safe and moderate fashion. Alcohol has dependency-producing properties and is abused by a substantial minority – between 5 and 35 per cent of the population, depending on the definition of abuse (Haggerty, 1994).

Alcohol is a depressant. It depresses the functions of the brain and other parts of the central nervous system and has direct toxic effects on the liver and other organ systems through its metabolites. Even moderate amounts reduce inhibitions and make people less aware of their surroundings, while heavier doses produce cognitive and motor impairment (Brand, Sproule, & Marshman, 1998). Long-term excessive use is associated with numerous medical and psychiatric complications. In addition, alcohol is a proven teratogen[1]; it is the commonest cause of birth defects and learning disabilities in Canadian children.

Consumption

After caffeine, alcohol is probably the most common psychoactive substance consumed in Canada. About 80 per cent of B.C. adults consume alcohol in a given year, according to population health surveys. British Columbia is second only to Quebec in the proportion of the population (age 12 and over) reporting "regular drinking" (at least one drink each month) – 56 per cent versus 57 per cent (Advisory Committee on Population Health, 1999).

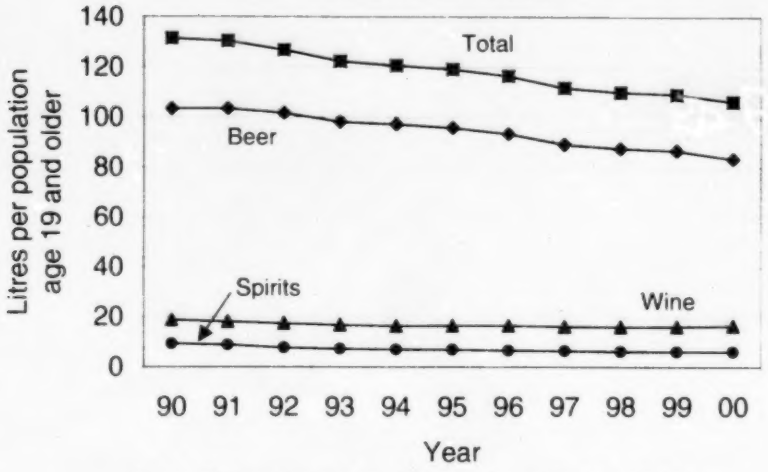
Per capita sales of alcoholic beverages have been declining in B.C., most noticeably for beer and spirits (Figure 2). Wine consumption, having fallen until 1997, has subsequently seen returns in per capita consumption, with levels approaching those of 1993. Based on alcohol sales figures, B.C. ranks mid-range among Canadian provinces and territories in terms of per capita consumption.

The decline in per capita sales may reflect diminishing disposable income, an aging population, a changing norm around levels of consumption, or a combination of these or other factors.

[1] An agent that can cause malformations of an embryo or fetus.

Figure 2

Per Capita Sales of Alcohol
B.C, 1990 - 2000



Source: Brewers Association of Canada. Annual Statistical Bulletin. http://www.brewers.ca/frames/enter_statistics.htm

Drinking Patterns

Men are more likely than women to be regular drinkers. Among those who drink, men consume more alcohol than women, and they also drink more frequently. These gender differences are found in all age groups, but are most pronounced among 25-44 year olds.

There is a bell-shaped relationship between drinking prevalence and age (Advisory Committee on Population Health, 1999). Alcohol use begins in the early teens and increases rapidly. Forty-seven per cent of B.C. boys and 41 per cent of girls have tried alcohol by age 13. By age 17, the percentage rises to 80 per cent for both sexes (The McCreary Centre Society, 1999). The proportion of the population who drink levels out in the early 20s, then starts to decrease at age 55-64.

There is a positive relationship between socioeconomic status and regular drinking. University graduates and those in the highest income group are more likely to be regular drinkers than those with lower income and educational levels.

Harms

While most drinkers consume alcohol responsibly, the harms caused by alcohol misuse are substantial, and in terms of substance abuse, the costs of alcohol misuse are exceeded only by the costs of tobacco.

A variety of health and social measures are used as indicators of alcohol misuse. Some of these measures show improving or stable trends, while others suggest that alcohol-related problems are increasing. Details of these trends are described in the following table.

Table 1:
Indicators of Problem Drinking, B.C.

		Trend
Regular heavy drinking, 1998-99 [1]		
(of those who report drinking alcohol)		
Men age 12 and over	29%	Increasing
Women age 12 and over	11%	Not much change
Total age 12 and over	20%	Increasing
Binge drinking in past month, Grade 7-12 students, 1998 [2]		
(of those students who have used alcohol)		
Males	45%	Increasing
Females	42%	Increasing
All students	44%	Increasing
Spousal assault incidents, 2000 [3]		
Number that were alcohol-related	4,944	Not much change
Per cent of spousal assault incidents alcohol-related	49%	Not much change
Alcohol causes problems at home, 1996-97 [4]		
Per cent of children age 0 to 11 whose parents say drinking is a source of tension or disagreement in the home	5%	Trend not available
Alcohol-related birth defects [5]		
Per cent of women who drink during pregnancy	12%	Trend not available
Estimated number of babies born with FAS each year	120	Trend not available
Estimated number of babies born with partial FAS	180	Trend not available
Alcohol-related traffic collisions, 1999 [6]		
Alcohol-related collisions	2,228	Decreasing
Alcohol-related fatalities (victims who died)	96	Decreasing
Alcohol-related collisions per 10,000 licensed drivers	8.1	Decreasing
Alcohol-related deaths, 2000 [7]		
Directly related, e.g., cirrhosis, alcoholic psychoses	317	
Indirectly related, e.g., accidents	1,372	
Total alcohol related deaths	1,689	
Rate per 10,000 population	3.7	Not much change
Alcohol overdose deaths, 1999 [8]		
Number of alcohol overdose deaths	24	Not much change

[1] Proportion of current drinkers age 12 and over who report having had five or more drinks on one occasion, 12 or more times in the previous year. Statistics Canada. National Population Health Survey. Health Indicators Volume 2001, No. 3., December 2001. [2] Students who report consuming 5 or more drinks within a couple of hours in the past month, as a proportion of students who have used alcohol. Adolescent Health Survey II. The McCreary Centre Society. [3] B.C. Ministry of Public Safety and Solicitor General. Police and Crime, Summary Statistics 1991-2000. [4] National Longitudinal Survey of Children and Youth 1996-97. Prepared for the B.C. Ministry of Children and Families by the Centre for International Statistics. [5] Proportion of mothers of children less than two years old who say they consumed alcohol during all or part of their pregnancy. National Longitudinal Survey of Children and Youth 1996-97. In Measuring Our Success, B.C. Ministry for Children and Families, December 1999. Number of babies born with FAS, estimated at 3 per 1,000 live births. Number of babies born with significant long-term disabilities related to partial FAS estimated at 4-5 per 1,000 live births. [6] Police-attended collisions where alcohol involvement was judged to be a contributing factor. B.C. Traffic Collision Statistics, ICBC. [7] Rate: age standardized rate per 10,000 population. B.C. Vital Statistics Agency. [8] B.C. Coroners Service.

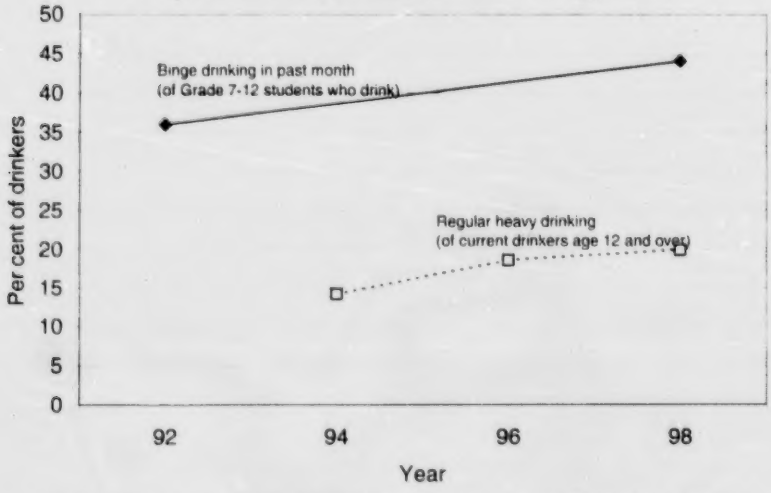
Risky Drinking

Twenty per cent of B.C. drinkers were "regular heavy drinkers" in 1998-99, according to the National Population Health Survey. This amounts to more than half a million British Columbians who could be considered as problem drinkers. Since it is generally accepted that the frequency of drinking (as well as the amount) is under-reported in household surveys, it is likely that this number is an under-estimate.

Despite the decreases in per capita consumption in B.C., regular heavy drinking has actually been increasing in frequency. In 1994-95, 14 per cent of B.C. drinkers reported drinking at this level. The percentage rose to 19 per cent in 1996-97 and 20 per cent in 1998-99 (Figure 3). British Columbia is not alone in this trend. Seven out of 10 provinces showed year over year increases in regular heavy drinking over this time period (Statistics Canada, 2001).

Figure 3

Indicators of Problem Drinking, B.C.



Regular heavy drinking: Proportion of current drinkers age 12 and over who report having had five or more drinks on one occasion, 12 or more times in the previous year. Statistics Canada. National Population Health Survey. Health Indicators Volume 2001, No. 3., December 2001.
Binge drinking: Students who report consuming 5 or more drinks within a couple of hours in the past month, as a proportion of students who have used alcohol. Adolescent Health Survey II. The McCreary Centre Society

The Adolescent Health Survey found that heavy drinking is becoming more common among B.C. youth. Of high school students who drink, the rate of binge drinking in the previous month increased from 36 per cent in 1992 to 44 per cent in 1998 (The McCreary Centre Society, 1999).

Regular heavy drinking (5 or more drinks on one occasion, 12 or more times in the past year) is most common among youth. However, an individual's drinking patterns are not static, and risky drinking can occur in mid-life and senior years, too. Drinkers age 20-29 and 45-64 are the age groups most likely to drink more than 14 drinks weekly, the maximum number of drinks recommended under low-risk drinking guidelines (see "Benefits").

Family Violence

About half of all spousal assault incidents reported in B.C. – 4,944 incidents in 2000 – were alcohol-related. This proportion has not changed substantially since 1993 (B.C. Ministry of Public Safety and Solicitor General, 2001).

About 5 per cent of parents (of children age 0 to 11 years) say drinking is a source of tension or disagreement in the home. Children in these families are being exposed to inappropriate consumption and are at increased risk of alcohol misuse themselves.

Fetal Alcohol Syndrome (FAS)

FAS is a set of physical and behavioural characteristics that include growth restriction, neurological damage, and certain facial features. FAS often results in physical handicaps, mental retardation, and other disabilities. Children may also be born with partial FAS, resulting in significant behavioural problems or learning disabilities. Other problems associated with alcohol use during pregnancy are low birthweight, death within the first month of life, and alcohol withdrawal in the newborn.

Because they involve a complex set of abnormalities, FAS and related disorders can be difficult to diagnose. Estimates are that for every thousand babies born, up to three have the full features of FAS, while an additional four or five will have significant long-term disabilities related to partial FAS. For British Columbia, this means that between 200 and 320 infants may be born affected by alcohol each year.[2] First Nations communities appear to be particularly affected.

[2] At present, there are no B.C. data on the frequency of FAS. The Health Status Registry and reporting sources are working together to improve provincial information on this condition.

Child Deaths

The Role of Alcohol in the Lives and Deaths of Children and Youth in British Columbia, a recent review by the Children's Commissioner of 558 fatalities, concluded, "Alcohol has a profound presence in the lives and deaths of these children. It is present at the time of death of two out of five motor vehicle accidents, and one out of three suicides and drownings. Alcohol also played an important role historically in the lives of many of the cases we reviewed."

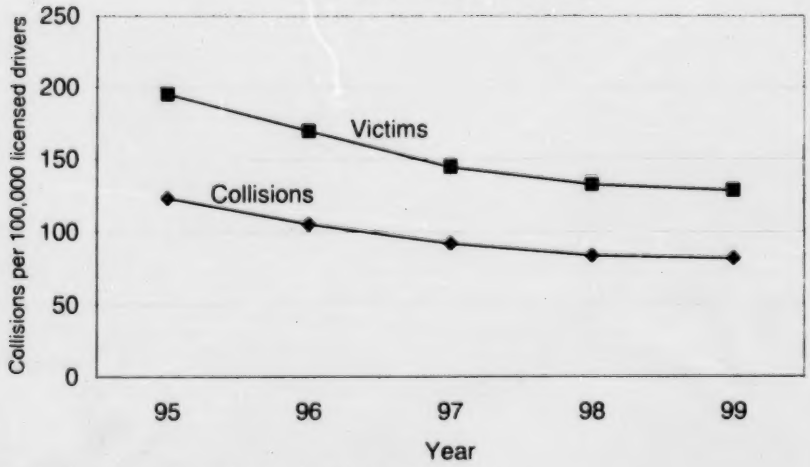
The Children's Commissioner also reported that prenatal exposure to alcohol occurred in approximately 1 in 10 cases they reviewed. Approximately 37 per cent of the deaths of children who had prenatal alcohol exposure were SIDS deaths (The Children's Commission, February 2001).

Traffic Collisions

Based on police reporting, alcohol-related traffic collisions have been dropping in B.C., both in absolute numbers and as a rate per 10,000 licensed drivers (Figure 4). ICBC statistics show 2,228 alcohol-related collisions in 1999, in which 3,407 victims were injured and 96 victims died. Although these are large numbers, they represent a substantial decrease since 1995, when 3,027 alcohol-related collisions were reported, resulting in 4,658 injuries and 146 deaths.

Figure 4

Alcohol-Related Traffic Collisions
B.C., 1995 - 1999



Source: Traffic Collision Statistics 1995-1997, 1998, 1999. ICBC.
http://www.icbc.com/Library/research_papers/Traffic/
Note: A portion of the decrease in alcohol-related collisions may be due to an overall decrease in police collision reporting. For details, see page 1 of *Traffic Collision Statistics 1999*.

These figures may represent a real decrease in alcohol-related collisions, injuries, and deaths. However, the apparent improvement may also be due to an overall decrease in police collision reporting. According to ICBC's 1999 *Traffic Collision Statistics* report, collisions dropped by 19 per cent from 1995 to 1996 and fell by a further 37 per cent from 1996 to 1997. During these years, a handful of police jurisdictions ceased to submit collisions report forms altogether. Following efforts by the RCMP and ICBC to improve reporting, the police reporting level appears to have stabilized since 1998.

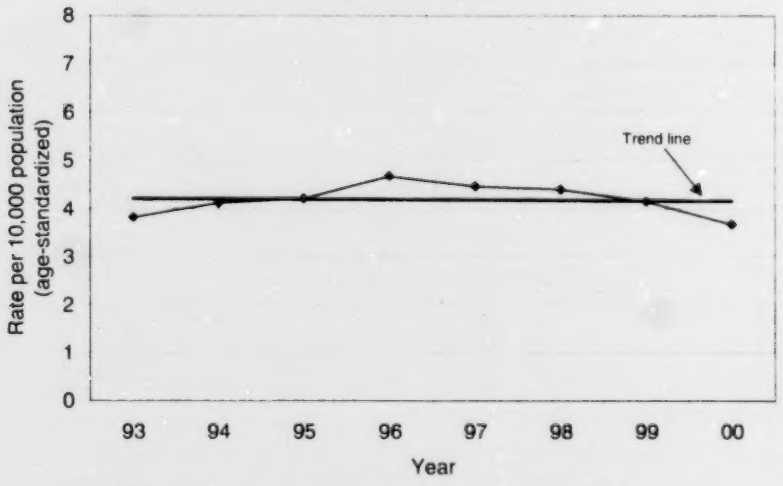
Alcohol-Related Deaths

B.C. Vital Statistics Agency (2001) estimates that 1,689 British Columbians (1,283 men and 406 women) lost their lives as a result of alcohol consumption in the year 2000. The rate of alcohol-related deaths has not changed significantly in the past decade (Figure 5).

Figure 5

Alcohol-Related Deaths

B.C., 1993 - 2000



Source: B.C. Vital Statistics Agency. Data obtained from the Health Data Warehouse, B.C. Ministry of Health Services. HDW release date: December 2001. See Glossary section of the Vital Statistics annual reports (http://www.vs.gov.bc.ca/stats/annual/index.html) for a detailed definition of "alcohol-related."

The Vital Statistics definition includes deaths where alcohol was the underlying cause of death, such as alcoholic liver disease or alcoholic psychoses, as well as diseases or accidents where alcohol was specified on the death certificate as a contributing factor. It does not include an attributable proportion of other causes of death (such as certain cancers) where it is well established that high levels of alcohol consumption increase the relative risk of death due to those causes.

Status Indian people are at higher risk for alcohol-related deaths. In the Status Indian population, there were 21 alcohol-rated deaths per 10,000 standard population during the period 1991 to 1999. This is almost six times the rate of 3.5 for other B.C. residents during the same time period (B.C. Vital Statistics Agency, July 2001).

Coroners Office figures on the number of alcohol overdose deaths have remained steady over the period 1995-1999, with an average of 28 deaths per year.

Benefits and Costs

Benefits

In addition to the harms associated with alcohol, it is important to consider the benefits. Alcohol can have health benefits for some segments of the population, and the production and sale of alcohol beverage products have economic benefits. Other benefits of alcohol consumption include the social benefits of relaxation and the easing of social intercourse as an accompaniment to dining and other social activities.

Moderate alcohol consumption has been demonstrated to have a beneficial impact on heart disease and stroke mortality and morbidity. These health benefits apply mainly to people over the age of 45. Among younger people – men who have not reached their 40s and pre-menopausal women – no beneficial effect on mortality has been demonstrated (American Council on Science and Health, 1999).

The potential health benefits of moderate drinking in middle-aged and older people can be achieved at consumption levels of one-half to one standard drink per day. Higher levels of intake do not produce greater benefits. For most people, more than two drinks a day does more harm than good.[3]

While moderate drinking can reduce the risk of heart disease for some people, there are other preventive measures that may be more effective. These include eating a healthier diet, getting more exercise, and giving up smoking. In fact, a WHO report concluded that encouraging drinking on the basis of hoped-for reductions in heart disease mortality would likely result in more harm to the population than benefit (Edwards et al., 1994).

The production and sale of alcoholic beverages contributes to the B.C. economy. The net income of the B.C. Liquor Distribution Branch was $642 million in the 2000-01 fiscal year (B.C. Liquor Distribution Branch, 2002). Government also collects a 10 per cent sales tax on alcohol sold in both government liquor stores and private outlets.

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[3] Low-Risk Drinking Guidelines are no more than 2 standard drinks on any one day, with no more than 9 drinks a week for women and 14 a week for men. These guidelines were developed by a team of medical and social researchers from the University of Toronto and the Centre for Addiction and Mental Health, based on scientific evidence about the health benefits and risks of alcohol use. See http://www.camh.net/addiction/pims/low_risk_drinking.html for more information.

Costs

The most recent analysis of alcohol-related costs for B.C. is contained in the 1999 *Canadian Profile of Alcohol, Tobacco and Other Drugs*. These data are based on a study estimating the economic costs of alcohol, tobacco, and illicit drugs in Canada in 1992 (Single, Robson, Xie, & Rehm, 1996). The study was conducted by the Canadian Centre on Substance Abuse in collaboration with addiction and law enforcement agencies across Canada.

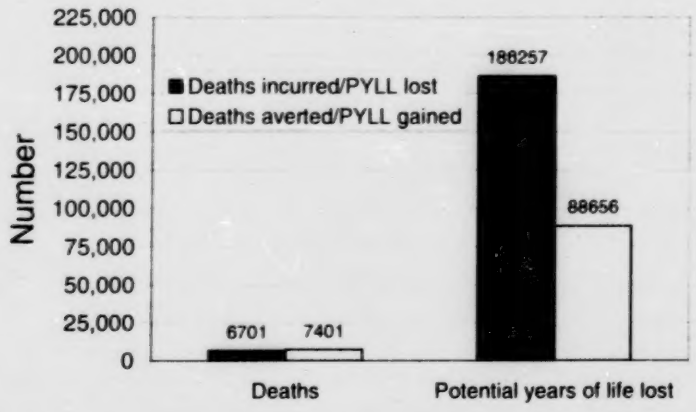
British Columbia's health care costs due to alcohol were estimated at $179 million annually. Law enforcement costs added $143 million, with a further $529 million for lost productivity due to morbidity, premature mortality, and crime, and $93 million for fire damage, traffic accidents, and other direct costs. This translates into an avoidable yearly cost of about $944 million or $272 per capita. British Columbia's per capita cost was higher than most other provinces, being exceeded only by Alberta ($285) and Prince Edward Island ($283) (Canadian Centre on Substance Abuse, 1999).

The 1992 study noted that alcohol consumption averted more Canadian deaths from ischemic heart disease and stroke among older adults (7,401) than it caused from unintentional injuries and suicides among younger adults (6,701). However, because the potential years of life lost to alcohol occur in relatively younger adults, the total years of life lost to alcohol (186,257) was more than twice as large as the number of years of potential life saved by the beneficial effects (88,656) (Figure 6).

Figure 6

Health Losses and Gains due to Alcohol

Canada 1992



Source: E. Single, L. Robson, X. Xie, & J. Rehm. (1996). *The costs of substance abuse in Canada*. Ottawa: Canadian Centre on Substance Abuse.

In the same year, the value of alcohol sold in B.C. in 1992 was $1.46 billion, from which the province derived a total revenue of $522 million, 2.8 per cent of government's revenue in 1992-93 (Canadian Centre on Substance Abuse, 1999).

Alcohol Policy

Public Opinion

Canadians generally support some measures of control on access to alcohol. Public opinion surveys show that older Canadians and women tend to favour more restrictive policies, while younger people, particularly heavy-drinking males, favour greater access (Anglin, Giesbrecht, Kobus-Matthew, McAllister, & Ogborne, 2001).

In general, policy measures that provide information or treatment are more strongly supported that those that raise prices or control physical access. In 1994, 69 per cent of British Columbians supported more alcohol treatment availability, and 81 per cent favoured doing more to prevent impaired customers from being served. There was strong opposition to putting alcohol into corner stores, with 74 per cent opposed. Fewer were in favour of raising the drinking age (36 per cent), increasing alcohol taxes (31 per cent), and reducing store hours (17 per cent) (Canadian Centre for Substance Abuse, 1999).

These 1994 findings are the most recent public opinion data on alcohol policy, other than a survey question asked in a poll last year on B.C. residents' attitudes towards privatization of crown corporations. British Columbians were split about whether to privatize the liquor distribution branch, with 45 per cent agreeing and 45 per cent disagreeing (McIntyre & Mustel Research Ltd., 2001).

Changes to Alcohol Availability

It is clear that significant changes to alcohol policy are either under way or under consideration in British Columbia. In general, these changes are likely to increase access to alcohol through extended hours of purchase, increases in the number of outlets selling beer, wine, and spirits, and lessening of controls over how and where alcohol may be sold.

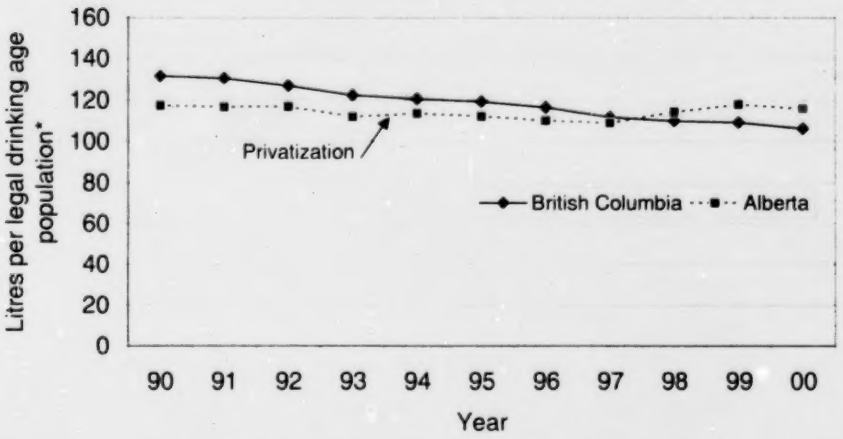
Whether this increase in availability will result in increased consumption and health and social impacts is at present unknown. However, there is a long-standing assumption that alcohol availability affects consumption, which in turn affects alcohol-related health and social problems.

Studies in a number of U.S. states show that when alcohol becomes more available, consumption and the prevalence of alcohol-related harms increase (Pacific Institute for Research and Evaluation, undated). Ontario studies reviewing the relationship between physical availability of alcohol (hours, density), alcohol consumption, and alcohol-related harms are inconclusive (E. Single, personal communication, April 15, 2002). One study projected that per capita consumption could increase by 11 to 27 per cent under different privatization scenarios (Her, Giesbrecht, Rehm, & Room, 1996). Data from Alberta show a more modest increase (3 per cent) in per capita consumption in the 6 years since privatization of its retail system (Figure 7).

Figure 7

Per Capita Consumption of Alcohol

B.C. and Alberta, 1990-2000



* Legal drinking age is 19 years old in B.C and 18 years old in Alberta.
Source: Brewers Association of Canada. Annual Statistical Bulletin.
http://www.brewers.ca/frames/enter_statistics.htm

Given that hazardous drinking patterns are predominantly found in younger rather than older age groups, and given that the rates of hazardous drinking among B.C. youth have been shown to be increasing, any increase in alcohol consumption either by volume or by frequency in this cohort should be viewed with concern. Conversely, moderate increases in consumption by older persons who have no medical contraindications and who do not exceed the safe drinking guidelines could result in beneficial effects in terms of disease prevented. The public health challenge, therefore, is to optimize the potential benefits of alcohol consumption while minimizing the damages.

Best Evidence for Informing Public Policy

If the public policy goal is to exert an impact on alcohol consumption in such a way as to have ready access and at the same time reduce the adverse affects that can accompany consumption, then research evidence is clear. An international group of experts provides the following advice to those involved in defining alcohol policy:

1. There is no one policy panacea. The needed policies will be a mix.
2. Some policy measures are more effective than others. The basic, evidence-based policy mix includes taxation, control of physical access, drinking-driving countermeasures, and treatment – particularly primary care. Educational strategies, restrictions on advertising, and community action programs are additional measures with the potential for long-term pay-off.
3. Political feasibility and public acceptance are important in selecting alcohol policies.
4. Policy choices have national and international dimensions.
5. Policy choices have to be determined not only by what is effective, but by what gives value for money.

G. Edwards et al. (1994). *Alcohol policy and the public good*, p. 211. WHO Europe. Oxford: Oxford Medical Publications.

For many drinkers, the years between the teens and mid-thirties are likely to involve social and personal risks related to drinking. While regular daily alcohol use may be more common in later years, young adults generate an unrepresentative share of heavy drinking events and various forms of trauma and violence. Prevention efforts should focus on these populations. There are numerous options for enhanced policy and programming in this area (Single, in press).

Conclusion

Alcohol is a generally accepted and traditional part of Canadian life, and almost certain to remain so. When used safely, alcohol can be an enjoyable part of the lives of many British Columbians without demonstrable harm. This is in contrast to tobacco, for which there is no recognized safe level of use. However, alcohol has the capacity to cause harm if not used in a safe and moderate fashion.

Government occupies a unique role with respect to alcohol. It is the regulator, the wholesaler, and the retailer. Government realizes significant remuneration from alcohol and also pays many of the costs incurred when alcohol is misused.

Increased access to alcohol may lead to increased consumption. Indeed, this is the rationale provided by the Association of Canadian Distillers for supporting regulatory changes (Westcott, 2002). Increased access may lead to increased problems, as well as economic benefits.

The older cohort of (mature) drinkers are likely, if they increase consumption, to do so moderately. Provided that this increase does not occur in individuals for whom alcohol is contraindicated, and that it meets low-risk guidelines for volume and frequency, increases in consumption may be expected to confer some population health benefit from reductions in heart disease and stroke.

There is, from the evidence, a risk that the increased consumption will occur predominantly in less mature drinkers and will exacerbate the trends of increased risky drinking that have been evidenced in youth and younger drinking cohorts. If that were to occur, there could be a significant increase in net social harms that is unlikely to be offset by any improved health benefit to this population. Depending on its magnitude, harms resulting from increased consumption in the younger population of drinkers may outweigh any health benefit to older populations and may cost more than the economic benefits realized through increased sales.

The public policy goal, therefore, should be to *maximize benefits and* minimize harms. Given the goal of maximizing benefits and minimizing costs, the Provincial Health Officer recommends that changes to liberalize alcohol sales be accompanied by:

1. Monitoring of public health and safety impacts of policy changes, e.g., rates of traffic crashes, crime, and chronic health problems.
2. Increased prevention programming with a focus on children and youth and on modifying risky drinking behaviours.
3. Rigorous monitoring and enforcement of laws relating to sales to underage and intoxicated consumers.
4. An enhancement of the addictions treatment and rehabilitation system.
5. Evaluation of prevention policies and programs, with reduction of drinking-related harms as the main criterion of effectiveness.
6. Involvement of public health experts in the planning of future changes to alcohol policy.

The above recommendations will require a dedicated and secure funding base. One option is to set aside an amount equivalent to 10 per cent of the anticipated tax revenue from increased alcohol sales for enhancements to prevention programming. This approach has been used successfully in New Zealand (Single, 2001).

References

Advisory Committee on Population Health. (1999). *Statistical report on the health of Canadians*. Prepared by the Federal, Provincial and Territorial Advisory Committee on Population Health for the Meeting of Ministers of Health, Charlottetown, P.E.I., September 16-17, 1999. Ottawa, ON: Health Canada, Statistics Canada, and the Canadian Institute for Health Information. Cat. No. H39-467/1999E.
http://www.hc-sc.gc.ca/hppb/phdd/report/stat/eng/

American Council on Science and Health. (1999, February). *Moderate alcohol consumption and health*. New York, NY: American Council on Science and Health.
http://www.acsh.org/press/releases/alcohol021199.html

Anglin, L., Giesbrecht, N., Kobus-Matthew, M., McAllister, J., & Ogborne, A. (2001). *Public opinion of Ontario adults on alcohol policy issues: Findings from a 1999 general population survey*. Toronto, ON: Centre for Addiction and Mental Health.

Bondy, S.J., Rehm, J., Ashley, M.J., Walsh, G., Single, E., & Room, R. (1999, July-August). Low-risk drinking guidelines: The scientific evidence. *Canadian Journal of Public Health, 90*(4), 264-270.

Brands, B., Sproule, B., & Marshman, J. (Eds.). (1998). *Drugs & drug abuse*. Toronto, ON: Addiction Research Foundation.

Brewers Association of Canada. (2000). Per capita consumption of beer, spirits and wine based on legal age population. *Annual Statistics Bulletin*.
http://www.brewers.ca/frames/enter_statistics.htm

British Columbia. Liquor Distribution Branch. (2002). *Three year corporate strategy: A service plan for 2002 – 2004*. Victoria, B.C.: Liquor Distribution Branch.
http://www.bcliquorstores.com/en/about/corporatestrategy

British Columbia. Ministry of Public Safety and Solicitor General. (2002, March 15). *Liquor reforms to improve public safety, consumer choice*. News Release 02:04.
http://os8150.pb.gov.bc.ca/4dcgi/nritem?5029

British Columbia. Ministry of Public Safety and Solicitor General. Police Services. (2001). *Police and crime: Summary statistics 1991-2000*. Victoria, B.C.: Ministry of Public Safety and Solicitor General. http://www.pssg.gov.bc.ca/police_services/publications/

B.C. Vital Statistics Agency. (2001). *Selected vital statistics and health status indicators Annual report 2000*. Victoria, B.C.: Ministry of Health and Ministry Responsible for Seniors. http://www.gov.bc.ca/stats/annual/index.html

B.C. Vital Statistics Agency. (2001, July). *Regional analysis of health statistics for Status Indians in British Columbia 1991-1999. Birth related and mortality summaries for British Columbia and 20 health regions*. Victoria, B.C.: Ministry of Health and Ministry Responsible for Seniors. http://www.vs.gov.bc.ca/stats/indian/index.html

Canadian Centre on Substance Abuse. (1999). *Canadian profile: Alcohol, tobacco and other drugs*. Ottawa, ON: Canadian Centre on Substance Abuse and Centre for Addiction and Mental Health. http://www.ccsa.ca/Profile/cp99high.htm

Edwards, G., Anderson, P., Babor, T.F., Casswell, S., Ferrence, R., Giesbrecht, N., Godfrey, C., Holder, H.D., Lemmens, P., Makela, K., Midanik, L.T., Norstrom, T., Osterberg, E., Romelsjo, A., Room, R., Simpura, J., & Skog, O-.J. (1994). *Alcohol policy and the public good*. Oxford: Oxford University Press.

Haggerty, J.L. (1994). Early detection and counselling of problem drinking. In the Canadian Task Force on the Periodic Health Examination, *The Canadian guide to clinical preventive health care* (pp. 488-498). Ottawa, ON: Health Canada. http://www.hc-sc.gc.ca/hppb/healthcare/pubs/clinical_preventive/pdf/s6c42e.pdf

Her, M., Giesbrecht, N., Rehm, J., & Room, R. (1996, September). *Projected effects of alcohol consumption resulting from privatization/deregulation of liquor control in Ontario*. ARF Research Document Series No. 128. Toronto, ON: Addiction Research Foundation (a Division of the Centre for Addiction and Mental Health).

Insurance Corporation of British Columbia. (annual). *B.C. traffic collision statistics*. North Vancouver, B.C.: Insurance Corporation of British Columbia. http://www.icbc.com/Library/research_papers/Traffic

McIntyre & Mustel Research Ltd. (2001, June 25). *BC residents' attitudes toward privatization of crown corporation*. Survey conducted June 8-14, 2001. http://www.mcintyremustel.com/062501.html

Pacific Institute for Research and Evaluation. (undated). *The effects of privatization of alcohol control systems*. Alexandria, VA: National Alcohol Beverage Control Association.

Single, E. (in press). Alcohol and youth: Time for effective action. *Canadian Journal of Public Health*.

Single, E. (2001, June). *Future directions: A report to the Alcohol Advisory Council of New Zealand*. Wellington, NZ: Alcohol Advisory Council.

Single, E., Robson, L., Xie, X., & Rehm, J. (1996). *The costs of substance abuse in Canada*. Ottawa, ON: Canadian Centre on Substance Abuse.

Statistics Canada. (2001, December). *Health indicators*, Volume 2001, No. 3. Ottawa, ON: Statistics Canada. http://www.statcan.ca/english/freepub/82-221-XIE/free.htm

The Children's Commission. (2001, February). *Fetal alcohol syndrome: A call for action in B.C.* Victoria, B.C.: The Children's Commission. http://www.childservices.gov.bc.ca/reports/special.htm

The Children's Commission. (2001, October). *The role of alcohol in the lives and deaths of children and youth in British Columbia.* Victoria, B.C.: The Children's Commission. http://www.childservices.gov.bc.ca/reports/special.htm

The McCreary Centre Society. (1999). *Healthy connections: Listening to BC Youth. Highlights from the Adolescent Health Survey II.* Burnaby, B.C.: The McCreary Centre Society. http://www.mcs.bc.ca

Westcott, J. (2002). In A.A. Duffy, Spreading the spirits around, *Times-Colonist*, March 6, 2002, pp. C6-C7.